

REMARKS

I – Amendment of the Specification

The specification has been amended at Page 14, Paragraph [033], line 8 to correct a minor grammatical error.

II – Newly Submitted Claim 35

Newly submitted claim 35 has been withdrawn from consideration by the Examiner as being to non-elected invention, and therefore, will not be prosecuted in this application.

III – The Rejection of Claims on 35 U.S.C. 112

The Examiner's rejection of Claims 30-34 under 35 U.S.C. 112 stems from the recitation that the first and second rows of the interlock structures are "inwardly of" respective ones of the first and second base edges; it being the Examiner's contention that the "interlock structure which contains the male projection is right on the edge and not inwardly of the edges as disclosed."

Applicant's respectfully submit that the instant application illustrates in FIG. 5 hereof and discloses at Page 14, Paragraph [033] (as amended hereinabove) that "Each interlock is comprised of a vertically projecting and a laterally disposed female recess or slot 46... The recess 46 adjoins the strip 45 by way of a common, inwardly inclined surface 49, FIG. 5, providing mutually

resilient catch structures that can be deflected to snap into mating relationship during installation."

As will be apparent from FIG. 5, the interlocking engagements that restrain both vertical and lateral separations between adjoining inverted and mating interlocks occurs along this interfacial surface provided by the inwardly-disposed sidewall portion of the male projection which also forms a sidewall portion of the female cavity. This sidewall portion is located inwardly of the file edge, as previously claimed, and as clearly illustrated in FIG. 5.

However, in the interest of avoiding this rejection, Applicant, at line 11 of Claim 30, has replaced the terms "inwardly of" with the term --adjacent--. Accordingly, it is requested that the Examiner withdraw this rejection of the Claims.

IV – The Rejection of Claims 30-34 Under 35 U.S.C. 103(a)

All claims as filed, were rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Austin (5907934) taken in view Costantino, with claim 31 being rejected over this combination and additionally in view of Ormiston (5755068).

Considering first the references singularly, the Austin patent does not provide a base interlock structure to which a decorative layer can be applied without adversely affecting the required functioning of the base interlock structures.

It is submitted that Austin fails to disclose an interlocking base or substrate structure that is suitable for a decorative floor tile as disclosed and as claimed herein. Applicant's contention will be quite apparent from a consideration of Applicant's Exhibit A attached as a sheet of paper to this response, to which the Examiner's attention is invited.

Two drawings of Exhibit A are copies of Austin's disclosed embodiments of FIG. 2 and FIG. 5, respectively, with the parts of each Figure being appropriately numbered, as will be apparent. The two FIGS. 2 and 5 embodiments are shown on the left side of Exhibit A. On the right side of the Exhibit and opposite thereto are the same two corresponding base interlock structures, designated FIGS 2A and 5A, respectively, shown inverted for respective mating engagements, as required of the Applicant's interlock structure and as claimed herein.

Thus, the female cavities 33 or 93 are shown inverted from their positions on the bottom of the tile in order to invert their corresponding male projections 34 or 95, respectively, for interlocking with the upwardly-facing female interlocks of an adjacent tile having a substantially mirror-image female cavity structure. When inversion of the tile 10 interlock occurs, the "multitude" of cavities 33 and 93 of the inverted tiles of FIGS 3A and 5A, face upwardly and would not be covered by respective interlock structures of FIGS. 2 and 5. Indeed, it appears very clear that the inverted projections 34 and 95 of FIGS 2 and 5 are not sized to interlock with an inverted, mating interlock structure of a contiguous tile.

Obviously the interlock structures shown by FIGS. 2A and 5A would not be suitable for use with a decorative tile having a laminate or layer extending over the downwardly facing projections 34 and 95 so as to be coextensive with that overlying edge of the tile. Not only would the top layer overlay the cavities 33 and 93, the stepped-down edge between the cavities and the adjacent tile top surface would likely appear as an undesirable surface extending break along and inwardly of the tile edge. Similarly, the recesses resulting from underlying cavities 33 and 93 could conceivably result in unsupported dimpling of the pliable laminate edge overlying the cavities as will be apparent to those in the art.

The major distinction between Austin's interlock structures and that of Applicant's is that Austin's male-female interlocks on opposite tile edges face in opposite directions whereas Applicant's male-female interlock structures, comprised of projections and recesses on each tile edge both face in the same direction; upwardly or downwardly; depending upon the particular tile edge on which the interlock structure is molded. Austin discloses in lines 51-53 under Column 1 that the cavities 33 are in the bottom surface 14 of the tile whereas as seen in FIGS. 2 and 5, and extend downwardly, whereas the male projections are cantilevered outwardly on a horizontal strip 56 and project upwardly. The same is true from Austin's FIG. 5 embodiment.

With respect to either embodiment, the Examiner's assertion beginning on Page 3, Paragraph 2, lines 15 of the Official Action and ending on Page 4, at line 2, does not appear to take this basic difference into account. As illustrated by Exhibit A, the side of the interlock structure facing the bottom surface is quite

clearly not disposed or adapted to engage a mating inverted interlock structure of another adjacent tile from the top of the base as claimed herein.

The Examiner also alleges that the cavities are “partially formed” by the horizontal strip (strip 58 or 56) that cantilevers the male interlocks to the tile 10 (Page 3, Paragraph 2, lines 13-15 of the Office Action). Applicant respectfully disagrees because, as shown in FIGS. 1 and 2 of Austin, the male projections can be eliminated from the side 20 without any apparent effect on the sidewalls of the cavities 32. The rounded edges 30 appear to be the result of simply removing the cantilevered strip 58 from the edges 30 at their point of intersection. The sidewall portions defining the cavities are clearly not common to the projection 34, as now called for by the instant amended claims because they are simply not operatively affected by the removal of the projections.

Figure 3 of Austin also supports Applicant’s position because the patentee’s specification discloses only interlocking as occurring between one gender of edge interlocks of a tile; either male or female; but not both, as disclosed and claimed herein. In support of this contention, Applicant points to the patentee’s description of the assemblage of FIG. 3, at lines 24-29 under Column 4, wherein it is stated that “The engaged male and female interlocks are shown in phantom at 74” and along edge 78 “female cavities 32 shown in FIG. 1 are not used.” Parenthetically, these cavities are in a row adjacent side 20 of the tile 12 as indicated in FIG. 1. Implicitly, the female cavities are not used because they cannot or will not mate with the mating male interlock structure on adjacent tile 80.

By this amendment, Claims 30-34 have been amended to provide greater lines of patentable distinction from Austin.

Specifically, at line 11 of Claim 30, the terms “inwardly of” have been changed to –adjacent—to avoid the Examiner’s rejection of the claims on 35 U.S.C. 112, as discussed hereinabove.

Additionally, Claim 30, and Claims 31-34 by virtue of their dependency on Claim 30, have been amended to recite that “each of said structures on said first and second edges being comprised of a male projection having sidewall portions projecting from it’s respective edge.” The claim also specified that the “contiguous female cavity (is) partially formed by a sidewall portion of said male projection.”

Claim 30, as amended, also specifies that “the second interlock structure of said second row facing upwardly from the second edges in the direction of the top tile surface” so as to clearly distinguish the respective oppositely-facing directions of the interlock structures on the first and second base edges.

Finally, Claims 30-34 have been amended again, by virtue of the amendment base Claim 30, to recite, in effect, that a decorative layer is adhered to the top tile surface of each tile and covers the first but not the second row of interlock structures, thereby incorporating the decorative layer aspect of dependent claim 31 into the Claims 30-34. This aspect of the invention provides the desired interlocking base structure for the application of a decorative layer result in an adhesive-free decorative floor tile, which may utilize carpet scrap otherwise possibly destined for a landfill.

The Examiner's rejection of Claims 30-34 is further predicated on combining Austin with Costantino on the bases "Costantino (6A) shows a plurality of stepped end edges longitudinally spaced from one another formed on opposite ends of the base, the ends being staggered in the longitudinal direction..."

Applicant contends that it is the "substrate 3" of Costantino which is to be compared with Applicant's base; not the panels 12, 13 and 14 which form the top layer applied to the substrate. The Costantino substrates have one thing in common; their opposite ends are straight and at right angles to their longitudinal edges. Staggering is the result of extending the "ends 2" of the panels beyond one square end edge of the underlying substrate so that they can be slid laterally onto the panel-free portion of the rectangular substrate of an adjacent panel. Nowhere in Costantino is there disclosed substrates 3 with staggered end edges to which the panels are applied. To the contrary, rectangularly shaped substrates with right-angled ends are evidently essential to Costantino for cantilevering the panel ends and providing square ends for adjoining square-ended substrates of adjacent panels.

Additionally, an assemblage of panels in Costantino requires three different floor structures 12, 13 and 14; unlike Applicant's assemblage of molded tiles, all of which are at least initially of substantially the same size and shape with substantially identical base interlocks structures.

A further notable distinction is that Costantino relies upon the top "hardwood strips 2" for providing edgewise tongue-and-groove interlocking. There is no provision for similar interlocks on the substrate. Obviously, this is

precisely contrary to the approach of Applicant's, wherein the interlock structure is on the base which supports the decorative layer. Because the interlocks are on the base or substrate component applicant perceived of the need and the solution of providing concealed base to base interlocking with adjacent tiles having decorative layers thereon. Therefore, Costantino provides no apparent disclosure or teaching applicable to Applicant's floor tiles and its combination with Austin as proposed by the Examiner appears to stem more from a generous application of hindsight than a valid combination of references capable of supporting a rejection under 35 U.S.C. 103(a). Accordingly, Applicant requests that the Examiner reconsider and withdraw the rejection.

Claim 31 stands rejected as unpatentable over Austin modified by Costantino and additionally modified by Ormiston, FIG. 2, "to enhance the appearance of the floor as taught by Ormiston." The Examiner characterizes the veneer panel 12 as a "tile" and obviously takes poetic license in doing so. Nowhere in Ormiston is the veneer panel characterized as a "tile". On the contrary, Ormiston discloses the panel 12 as being formed from a "rectangular blank" having a "base layer 16 preferably formed of a pressed board or fiberboard material of wood fibers'..." (Col. 3, lines 45-49). The veneer is also composed of wood (Col. 3, lines 53-54). There is no suggestion that the base or veneer layer might be composed of a plastic material or molded as a floor tile, as disclosed and claimed herein.

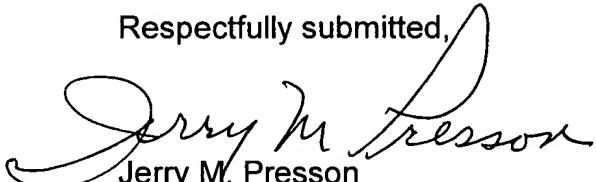
The base 16 is made rectangular ala Costantino without either end having staggered edges. Any staggering is simulated by providing transverse grooves

34 in the veneer (Col. 4, lines 42-44). Clearly, not the approach disclosed or claimed by Applicant. Consequently, it is respectfully requested that the Examiner withdraw his rejection of Claim 31.

In view of the foregoing amendments and remarks, Applicant respectfully requests allowance of Claims 30-34, inclusive, and early passage to issue of the present application. No additional fees are believed to be owed by reason of this Amendment because there has been no change in the number of claims.

Applicant's attorney may be reached at (203) 378-8354. All correspondence should continue to be directed to the below-listed address.

Respectfully submitted,



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